



**DRAFT Agenda (rev 12/8/99)
WORKING GROUP MEETING
Thursday, December 9, 1999**

**SWANSEA RECREATION CENTER
2659 East 49th Avenue, Denver, Colorado
8:30 AM (promptly) to 1:00 PM**

EPA's Meeting Objective:

EPA will begin to draft the Baseline Risk Assessment for the Off-Facility Soils at the VB/I-70 Site in January 2000. This effort will continue through February 2000. The draft Baseline Risk Assessment document is the culmination of all the work accomplished by EPA at the VB/I-70 Site since the Working Group began to meet formally in 1998.

The **December 9, 1999 Working Group meeting is intended to provide a forum for participants to provide verbal input to EPA on any aspect of the Baseline Risk Assessment at this pre-draft stage.** Similar to the process by which EPA produced other Superfund documents at this site, there will be opportunities for the Working Group to provide written comments on the draft document once it is completed and transmitted by EPA.

The Working Group discussions are structured in the framework of the risk assessment process.

Supporting documents of EPA's Baseline Risk Assessment will be delivered to you Tuesday, December 7, 1999 for your review. Please read them in preparation for this meeting. (All of you have seen most of this before in some form.)

**FINAL DISCUSSION OF BASELINE RISK ASSESSMENT COMPONENTS – EPA,
Bonnie Lavelle & Chris Weis**

1. Background

A. EPA will rely on the Baseline Risk Assessment results to determine whether clean up action is required for the Off-Facility Soils at the VB/I-70 Site.

At this meeting, we will review the key points in the EPA Directive, "Role of the Baseline Risk Assessment in CERCLA Remedy Selection Decisions"

B. The VB/I-70 Baseline Risk Assessment was designed to meet specific objectives which were developed by EPA with input from the VB/I-70 Working Group

At this meeting we will briefly review the final Risk Management Objectives

C. The VB/I-70 Baseline Risk Assessment was designed to address specific exposure scenarios and exposure pathways identified in the Site Conceptual Model which was developed by EPA with input from the VB/I-70 Working Group.

The Site Conceptual Model organizes the VB/I-70 Site into two separate areas:

1. Soils outside of the historical smelter locations (Argo Smelter and Omaha Grant Smelter). The term "off-facility soils" is used in the model to describe this area; and
2. Soils located on the sites of historical smelters. The term "on-facility soils" is used in the model to describe this area.

Only the exposure pathways associated with the off-facility soils will be addressed in the Baseline Risk Assessment document now being prepared by EPA. At this meeting we will briefly review those exposure pathways for which risks will be calculated.

QUESTIONS FOR THE WORKING GROUP

- (1) Is there a general understanding of how the Risk Management Objectives and the Site Conceptual Model were used by EPA to design the Baseline Risk Assessment?
- (2) Is it clear that the Baseline Risk Assessment document which will be prepared by EPA in January will address off-facility soils only?

2. Data Collection and Evaluation.

A. EPA designed the Phase III Soil Investigation specifically to provide data to support risk calculations. Phase III included investigations of surface soil in residential yards, surface soil in schools and parks, indoor dust at selected homes, garden vegetable samples and garden soils at selected homes, and alleys. The resulting data will be used as an estimate of the amount of arsenic and lead in the environment at places where people are likely to be exposed.

At this meeting, EPA will provide information on the status of the Phase III investigation. A summary of preliminary soil data will be provided. Data is not yet available for garden vegetables, garden soils, indoor dust, or schools and parks. We have not yet located any alleys which meet the criteria for sampling established in the Phase III project plan.

B. Phase III included chemical analysis of samples for arsenic and lead. This is because health risks will be estimated for actual and potential exposures to arsenic and lead only. Other smelter-related chemicals were evaluated by EPA and determined not to contribute significantly to potential risks at the VB/I-70 site.

C. Phase III was designed to provide data to allow the evaluation of both short term and long term risks. In response to concerns expressed in comments on the Phase III project plan, EPA developed 3 tests to be applied to the Phase III data to ensure that the sampling design does not miss "hot spots".

At this meeting, EPA will briefly review the sampling design for Phase III and the planned evaluation of the data. This will include not only the soil data but also the dust data, the garden vegetable and garden soil data, and the schools and parks data.

QUESTIONS FOR THE WORKING GROUP:

- (1) Are there any remaining questions about why the risk assessment for the Off-facility Soils will address arsenic and lead and will not address cadmium nor zinc?
- (2) Is it clear that only a percentage of all homes sampled for soil were also sampled for dust and vegetables? Are there questions about how EPA will use this information to estimate risks for the entire site?
- (3) Are there questions or concerns about the completeness of the Phase III data set?
- (4) Are there questions about EPA's plans to continue to characterize residential soils while completing the Baseline Risk Assessment?

3. Exposure Assessment

A. The Phase III Soil Investigation will provide an estimate of the amount of arsenic and lead in the environment at places where people are likely to be exposed. There are math equations that use this information in combination with "exposure parameters" to estimate the amount actually taken into the body. This process is the exposure assessment.

At this meeting EPA will review the concepts of Reasonable Maximum Exposure and Average Exposure. We will also briefly summarize all the exposure pathways which will be included in the Off-facility Soils Risk Assessment and all the exposure parameters which we intend to use.

B. The estimates of exposure will be expressed as a dose. EPA may adjust the estimated dose of arsenic at the VB/I-70 Site based on the amount likely to be *absorbed* by the body in an exposed person.

At this meeting, EPA will provide information on the status of the bioavailability study, conducted using soils from this site.

An example calculation of dose will be performed to illustrate the exposure assessment.

4. Toxicity Assessment

A. The dose of arsenic and lead estimated for people living within the VB/I-70 site will be compared to “safe” or “acceptable” doses in a process known as the toxicity assessment. In Superfund, cancer health effects and non-cancer health effects are evaluated.

At this meeting, EPA will review the non-cancer “reference doses” and the cancer “slope factors” which will be used in the risk assessment. We will clarify that for arsenic, the ATSDR “minimum risk level” is equal to the EPA “Reference Dose”.

5. Risk Characterization

The Baseline Risk Assessment document will summarize the estimates of risks for the VB/I-70 site in a section called Risk Characterization. This section will also describe the uncertainties in the risk calculations. The discussion of risk characterization will be appropriate once the risk assessment document has been completed and released by EPA.

PUBLIC HEALTH ASSESSMENT REPORT – ATSDR, Mellard

HEALTH CARE PROVIDER EDUCATION PLAN – CDPHE, Nancy Strauss

UPDATES

- Community Issues
- Health Team
- Biomonitoring conference call
- Medical monitoring conference call

ACTION ITEMS

- Review of November
- List from December meeting

MEETING EVALUATION